

Title (en)

SYSTEM AND METHOD FOR ACTIVELY REDUCING NOISE PASSING THROUGH AN OPENING IN A SOUND BARRIER

Title (de)

SYSTEM UND VERFAHREN ZUR AKTIVEN VERMINDERUNG DER DURCH EINE ÖFFNUNG IN EINEM SCHALLSCHUTZ DRINGENDEN GERÄUSCHE

Title (fr)

SYSTÈME ET PROCÉDÉ PERMETTANT DE RÉDUIRE ACTIVEMENT LE BRUIT PASSANT À TRAVERS UNE OUVERTURE DANS UNE BARRIÈRE SONORE

Publication

EP 3185240 A1 20170628 (EN)

Application

EP 15202063 A 20151222

Priority

EP 15202063 A 20151222

Abstract (en)

Described and claimed is a system for actively reducing noise passing through an opening in a sound barrier, the system comprising sound blocking arrangements. Each sound blocking arrangement comprises a sound source, a sensor and a control circuit. The sensor of each sound blocking arrangement is arranged to sense a sound characteristic in a location in the opening. The control circuit of each sound blocking arrangement is adapted to generate from the signal representative of a sensed sound characteristic a control signal for the sound source of the respective sound blocking arrangement and the sound source of each sound blocking arrangement is adapted to emit sound in accordance with the received control signal. The control signal for each sound blocking arrangement is determined such that the sound characteristic sensed by the sensor of the respective sound blocking arrangement is minimized and the distance between the location in which the sensor of the respective sound blocking arrangement senses a sound characteristic and the sound source of the respective sound blocking arrangement is kept as small as possible.

IPC 8 full level

G10K 11/178 (2006.01)

CPC (source: EP US)

G10K 11/17825 (2017.12 - EP US); **G10K 11/17857** (2017.12 - EP US); **G10K 11/17875** (2017.12 - EP US); **G10K 2210/118** (2013.01 - EP); **G10K 2210/12** (2013.01 - EP); **G10K 2210/3026** (2013.01 - EP); **G10K 2210/3219** (2013.01 - EP)

Citation (applicant)

- DE 102005016021 A1 20061012 - AIRBUS GMBH [DE]
- DE 102007012611 A1 20090108 - AIRBUS GMBH [DE]

Citation (search report)

- [X] US 6160892 A 20001212 - VER ISTVAN L [US]
- [Y] EP 1583075 A1 20051005 - TNO [NL]
- [Y] JP 2002201615 A 20020719 - NIPPON STEEL METAL PROD
- [A] US 2007223714 A1 20070927 - NISHIKAWA MASAO [US]
- [A] EP 2546830 A2 20130116 - PINTA ACOUSTIC GMBH [DE]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3185240 A1 20170628

DOCDB simple family (application)

EP 15202063 A 20151222